Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-21 (cancelled)

Claim 22 (new) A current-sense bias circuit for use with a magnetoresistive head, comprising:

(a) first and second transistors with first and second emitters, respectively, where said first emitter couples to a first terminals of said magnetoresistive head and said second emitter couples to a second terminals of said magnetoresistive head;

(b) a bias source connected between the base of said first transistor and the base of said second transistor, whereby said bias source established a bias voltage across said magnetoresistive head;

(c) first and second resistors, where said first resistor connects to the collector of said first transistor, and where said second resistor connects to the collector of said second transistor;

(d) first and second current sources providing first and second currents, respectively, where said first current source connects to said first emitter and couples to said first terminal of said magnetoresistive head, and where said second current source connects to said second emitter and couples to said second terminal of said magnetoresistive head;

(e) wherein a quiescent bias current through said magnetoresistive head equals the difference between said first current and said second current;

(f) wherein the emitter current of said first emitter equals said first current plus the current through said magnetoresistive head and the emitter current of said

second emitter equals said second current minus said current through said magnetoresistive head;

(f) whereby when said current through said magnetoresistive head varies from said quiescent bias current through said magnetoresistive head, such current variation appears in said first emitter current and in said second emitter current and results in a variation in the voltages at said first and second collectors and at said first and second resistors.

Claim 23 (new) The current-sense bias circuit of claim 22, further comprising:

(a) a current source control circuit with inputs connected to said first and second collectors and with output controlling said first and second current sources, whereby when said current through said magnetoresistive head is said quiescent bias current through said magnetoresistive head, said first and second collectors have the same votlage.

Claim 24 (new) A hard disk drive system, comprising:

(i) a motor;

(ii) a storage medium coupled to said motor for rotation thereby;

(iii) a magnetoresistive head proximate at least one surface of said storage medium; and

(iv) a current-sense bias circuit for use with said magnetoresistive head, including:

(a) first and second transistors with first and second emitters, respectively, where said first emitter couples to a first terminals of said magnetoresistive head and said second emitter couples to a second terminals of said magnetoresistive head;

(b) a bias source connected between the base of said first transistor and the base of said second transistor, whereby said bias source established a bias voltage across said magnetoresistive head;

(c) first and second resistors, where said first resistor connects to the collector of said first transistor, and where said second resistor connects to the collector of said second transistor;

(d) first and second current sources providing first and second currents, respectively, where said first current source connects to said first emitter and couples to said first terminal of said magnetoresistive head, and where said second current source connects to said second emitter and couples to said second terminal of said magnetoresistive head;

(e) wherein a quiescent bias current through said magnetoresistive head equals the difference between said first current and said second current;

(f) wherein the emitter current of said first emitter equals said first current plus the current through said magnetoresistive head and the emitter current of said second emitter equals said second current minus said current through said magnetoresistive head;

(f) whereby when said current through said magnetoresistive head varies from said quiescent bias current through said magnetoresistive head due to magnetic fields from said storage medium, such current variation appears in said first emitter current and in said second emitter current and results in a variation in the voltages at said first and second collectors and at said first and second resistors.

Claim 25 (new) The hard disk drive system of claim 24, further comprising:

(a) a current source control circuit with inputs connected to said first and second collectors and with output controlling said first and second current sources, whereby when said current through said magnetoresistive head is said quiescent bias current through said magnetoresistive head, said first and second collectors have the same votlage.